

Appl. No. 09/744,269
Atty. Docket No. AA335
Amdt. dated 6-08-2006
Reply to Office Action of 2-16-2006
Customer No. 27752

REMARKS

Claims 1-10 are pending in this application and all claims stand rejected.

Currently, Claims 1 and 10 are further amended in order to define the composition comprising an Acylate/C10-30 Alkyl Acrylate Crosspolymer. Support for this amendment can be found in the specification at page 4, first paragraph, lines 21-22.

It is believed these changes do not involve any introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

35 U.S.C. § 103(a)

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hitchin (U.S. 6,106,816) in view of Karlen et al. (U.S. 6,004,545), Rath et al. (U.S. 5,993,792) and Reng et al (US 5,403,508).

The Examiner has asserted that while Hitchin teaches shampoo compositions comprising copolymers of carboxylic acid such as Carbopol 1342, an aqueous carrier, visible particles, viscosity modifiers, silicon compounds, propylene glycol and cationic conditioning agents, Hitchin does not teach an amphoteric conditioning polymer, a UV absorber, an optical brightener, an herbal extract, or polyethylene glycol with a molecular weight up to 1000. The Examiner asserts that it would have been obvious to a person of skill in the art to add Merquat Plus 3300 to the composition of Hitchin to achieve the beneficial effect of an amphoteric conditioner in view of Karlen et al. and to add a pearlescent dispersion comprising fatty acid glycol esters and polyethylene glycols having a molecular weight between 200 and 800 to achieve the beneficial effect of an excellent pearlescent effect in view of Reng et al. As to the other claimed "further comprising" ingredients, the Examiner has asserted that it would have been obvious to one of ordinary skill to further include such compounds in the composition of Hitchin to achieve the extra beneficial effect of these additives in view of Rath et al. Applicants respectfully traverse this assertion.

In order to establish a prima facie cast of obviousness, the Examiner must show that (1) there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the

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reference or to combine reference teachings, (2) there is a reasonable expectation of success, and (3) all of the limitations of the claims are taught or suggested in the prior art (M.P.E.P. § 2143).

Applicants respectfully traverse this obvious rejection as Hitchen in view of Karlen et al., Rath et al. and Reng et al. does not establish a prima facie case of obviousness because they do not teach or suggest all of the Applicant's claim limitations and there is no motivation to combine reference teachings.

Hitchen relates to shampoo compositions. Hitchen discloses an aqueous shampoo composition comprising, in addition to water, a surfactant chosen from anionic, nonionic, or amphoteric surfactants, and mixtures thereof, an insoluble, nonvolatile silicone, a suspending polymer chosen from polyacrylic acid, cross-linked polymers of acrylic acid, copolymers of acrylic acid with a hydrophobic monomer, copolymers of carboxylic acid – containing monomers and acrylic esters, cross-linked copolymers of acrylic acid and acrylate esters, and heteropolysaccharide gums, and titanium dioxide coated mica.

However, Applicants have previously submitted that Hitchen does not disclose a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000, as now amended and required in the present invention. Examples 8-11 of Hitchen disclose propylene glycol only. Nor does Karlen et al. or Rath et al. teach a humectant as required by the present invention.

The benefit of the present invention is due to acrylic acid/alkyl acrylate copolymers which, together with the selection of a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000, provides favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling. However, Hitchen or Karlen et al. or Rath do not disclose or suggest the benefit of the present invention by the selection of a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000.

Applicants have surprisingly found that a humectant provides the leave-in-conditioner composition with conditioning benefits wherein a polyethylene glycol having a molecular weight of up to 1000, provides less stickiness when compared to low molecular weight humectants, such as propylene glycol, as disclosed by Hitchen. When

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compared to polyethylene glycols having a molecular weight higher than 1000, the present invention's humectant provides improved transparency and solubility.

In support of this argument, Applicants now submit a Declaration of Takashi Sako under 37 CFR 1.132. Tests were performed to compare the non-sticky feel performance of a leave-on-conditioner composition comprising polyethylene glycol (PEG-4) to a leave-on-conditioner composition comprising a humectant which is the propylene glycol. Examples A and B indicate that polyethylene glycol significantly reduces sticky feel as compared to propylene glycol. Thus, use of polyethylene glycol is beneficial in creating a non-sticky feel without tackiness on hands.

Further, the sample compositions A & B were evaluated using the combing tester per the 1.132 Declaration. The data in Table 3 of the 1.132 Declaration demonstrate the superiority of selected humectant (PEG-4) compared to other humectant (propylene glycol) as shown. As shown in Table 3, Formulation B containing PEG-4 has significantly reduced hair friction compared to the Formulation A containing propylene glycol. Thus, use of polyethylene glycol is beneficial in creating smooth feel of hair.

Therefore, the Applicants have found surprising results to demonstrate that one of skill in the art cannot interchange one humectant for another and obtain the same results. Clearly, Hitchen does not disclose a humectant comprising a polyethylene glycol having a molecular weight of up to about 1000. Likewise, neither Karlen et al or Rath teach or disclose the use of a humectant as taught in the present invention and further supported by the surprising results demonstrated in the 1.132 Declaration.

Reng et al. discloses that the object of the invention is to provide pearlescent dispersions which are free from fatty acid alkanolamides and nevertheless have the properties of the known pearlescent dispersions, such as low viscosity, good storage stability and excellent pearlescent effect. Reng et al. teaches that it has been found that when fatty acid alkanolamides are used, nitrosamines, which are a health hazard, can also be formed because of the residual amounts of secondary amines present. It has also been found that when the customary fatty acid alkanolamides are used, such as coconut fatty acid monoethanolamide, the formation occurs of relatively large crystals which tend to

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separate out to an increased extent and on the other hand bring about a low optical density, i.e. a low yield. Therefore the object of the Reng et al. invention is to provide pearlescent dispersions which are free from fatty acid alkanolamides and nevertheless have the properties of the known pearlescent dispersions, such as low viscosity, good storage stability and excellent pearlescent effect. The Examiner has asserted that Reng et al discloses low molecular polyhydric alcohols, in particular polyethylene glycols having molecular weights between 200 and 800, and therefore one of ordinary skill in the art would look to Reng et al, and further in view of Hitchen, and Karlen and Rath et al., would the present invention be disclosed.

Further, the Examiner has asserted that one of ordinary skill, reading Reng et al, would recognize that solution as an advantage to using the Reng et al pearlescent dispersion in the Hitchen composition. However, as supported by data in the 1.132 Declaration, one of skill in the art would not be lead by Reng et al, to the unexpected results of the 1.132 Declaration which have been found i.e, polyethylene glycol significantly reduces sticky feel as compared to propylene glycol beneficial in creating a non-sticky feel without tackiness on hands and significantly reduced hair friction compared to the formulation A containing propylene glycol. In particular, not without undue experimentation.

Further, there would be no motivation by one of skill in the art to look to a disclosure that is concentrating on improving pearlescent dispersions due to the negative impact of fatty acid alkanolamides, in order to arrive at the present invention, based on the supporting 1.132 Declaration.

Even if a *prima facie* case has been established, the presumption of obviousness has been overcome by a showing of unexpected results.

The 1.132 Declaration of Takashi Sako is sufficient to establish unexpected results. It was unexpected that these that polyethylene glycol significantly reduces sticky feel as compared to propylene glycol. Thus, use of polyethylene glycol is beneficial in creating a non-sticky feel without tackiness on hands.

Further, it was unexpected that the data in Table 3 of the 1.132 Declaration demonstrate that the superiority of selected humectant (PEG-4) compared to other humectant (propylene glycol) is shown wherein PEG-4 has significantly reduced hair

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friction compared to the formulation A containing propylene glycol. Thus, use of polyethylene glycol is beneficial in creating smooth feel of hair.

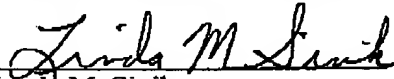
In light of the arguments presented herein, it is respectfully submitted that the rejection of the claims under 35 U.S.C. § 103(a) be withdrawn.

Conclusions

Applicants have made an earnest effort to place their application in proper form and distinguish their claimed invention from the prior art which was applied in the February 16, 2006 Office Action. WHEREFORE, consideration of this application, amendments filed herein, withdrawal of the rejections under 35 U.S.C § 103(a), and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

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June 8, 2006
Customer No. 27752